LANGUAGE LABORATORY MANAGEMENT TO SUPPORT TECHNOLOGY-BASED FOREIGN LANGUAGE INSTRUCTION

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Abstract: Language laboratory is one of media and teaching aids that cannot be separated from the foreign language teaching. The existence of language laboratory in such schools are considered as vital and essential things. It also becomes trend, culture, and alternative requirement to support the instructional process. Good and representative language laboratory that provides a number of educational objectives can bring interesting instructional activities. Moreover, it can be the fascinating devices equipping students in learning foreign language. This article will review and provide a framework for some informations and overviews of language laboratory, the main principles and guidelines for managing language laboratory, and explain how these principles can be applied for foreign language teaching. At the end of this article, it is suggested that either foreign language teacher or language laboratory manager along with school principals cooperate in maximizing the language laboratory as a means of supporting technology-based foreign language instructions

Keywords: language laboratory, management, technology-based, foreign language teaching

INTRODUCTION

The recent shift to global information means that students will need to learn how to deal with large amounts of information and have to be able to communicate across languages and cultures. With globalization, there has been a rise in demand for employees with

good communication skills. Moreover, with the growing demand for excellent communication skills, there have been explorations in the area of technology to fulfill this purpose and one such experiment has been in the field of language laboratory. At the same time, the role of teacher has changed. Teachers or lecturers are not only the learning resources, but also act as instructors, facilitators, and classroom controllers. In such situation, the teachers are encouraged to act as language laboratory managers (Konar, 2011).

Most of school institutions have built laboratories, starting from elementary, high school, and up to universities. Language laboratory is regarded as an essential room designed for learning language equipped with such modern electronic devices that enable both the teacher and the students communicate and interact actively. Language laboratory is such like the strategic element in implementing any goals of interest in achieving the purpose itself in the context of educating and language education. In foreign language teaching, language laboratory is commonly used by particular school due to the fact that they need it. Language laboratory is functioned to train the students to be able to practice what they should do to make it better for any skills. As the practice space, language laboratory has the main role so that the teachers or lecturers are able to utilize it in a right manner.

Furthermore, learning foreign language such as English needs the language laboratory attendance in teaching and learning the language. By the language laboratory presence, every students who learns will have the same space and opportunity in learning. If it is needed, they can utilize language laboratory based on their needs and capacities whether they have basic knowledge in operating these devices or not. In addition, it has been such an alternative technological learning aid that can support the foreign language teaching. Unavoidably, language laboratory also influences teaching and learning instructional process. Both conventional and modern language laboratory that we can see from the devices provided are expected to give contribution and facilitate students to learn foreign language.

Language laboratory, that can be abbreviated as "language lab", refers to a particular place or room in which the language learning activities, or training are carried out for certain purposes. In other words, it is a place where a group of people do language learning process as approaches of both theory and practice (Stack, 1971). The language laboratory plays an important role in the language learning process. As it is a technological aid for learning, it has a number of advanced facilities that can help students to learn a language with proficiency to communicate. In language laboratory, students are trained for listening so that they are able for sharpening the listening skill. The role of language laboratory in listening skill sharpening is the additonal value for the students because it speeds their volume for learning. Therefore, listening skill and the other skills with language laboratory are the two things that are not inseparable. In other words, language laboratory has become inevitable in today's context, but at the same time, it poses certain challenges. It means that the future challenges are that teachers or lecturers should be able to utilize the language laboratory for the right interest. Although the language laboratory is completed with any super modern elements, but the use is not maximal, the goal of teaching and learning for foreign language is not well achieved.

THE NEED OF LANGUAGE LABORATORY TO SUPPORT TECHNOLOGY-BASED FOREIGN LANGUAGE INSTRUCTION

The use of language laboratory, particularly in the countries for teaching foreign language, has been the requirements as one of the media that will cultivate students' innovative spirit, practical ability, and scientific attitude (Hua et al, 2015). The language laboratory opens the new era for learning the foreign language because in the language laboratory every students will learn easily. In developed country with the continous development of national economy, wide

application of information technology, most of traditional classroom has been replaced with technology oriented-language learning.

In Indonesia, the laboratory for language learning is something new to foreign language students. Not many schools or English Department have the modern and complete language laboratory. Hence, language laboratory which can be a media to support the teaching of foreign language cannot be afforded by most schools and universities in Indonesia due to its high cost (Syaifudin et al, 2015). It is understandable that building language laboratory to support technology-based foreign language will be complicated if it is not followed by needs analysis of students.

For the developing countries and those who considers English as a foreign language, language laboratory is the new hope for helping the students in making easy to learn English. Language laboratory presents the new strategies in learning English so that the teachers focus on teaching. The dynamic of teaching and learning English for those in developing countries are expected better. It means that the conventional teaching and learning English will be changed into the modern teaching and learning English because of language laboratory. On the other hand, it is very common in Western countries to train children in the laboratory to enrich their language learning experiences. Scientific advancements have produced a number of modern devices to assist the language learning process. Innovative learning tools, such as: computer-assisted language learning, digital multimedia control, wireless headsets and microphones, and others are very useful for students learning languages dealing with interaction and communication. These interactive tools are designed to enhance not only language teaching but also classroom grading and distance learning (Wilson and Thayalan, 2007). Such interactive tools have been well designed in language laboratory so that the students are feel at home for learning. By using interactive tools in language laboratory, it is expected that the activities for learning will run well and when the teachers or lectures deliver the material, the goal of teaching is achieved. In a

word, language laboratory with interactive tools actually assists the students and the teachers or lectures in providing the needs for achieving the goal of learning.

Moreover, the language laboratory is also representative enough for assessing students' skills. It provides them with the technical tools to get the best practiceof foreign language skills. The electronic devices used in language laboratory will stimulate the eyes, the mouths, the hands, the ears, and other students' gesturesto acquire the language quickly and easily. In short, each student can get the experience of having interaction with native speakers through the use of laboratory. It will also facilitate both the teacher and the students to integrate the various skills of foreign language learning (for example: listening, speaking, reading, and writing) and integrate technology more fully into language teaching. Hence, the language laboratory has become the need in foreign language learning process.

PROVIDING TECHNOLOGICAL DEVICES IN LANGUAGE LABORATORY

Scientific advancements have produced a number of innovative products to assist the learning process. Learning the language with modern technology and new approach because of modern one determines the path of learning goals. The success of learning the language and achieving the goal also depends on the tools used in language learning. There is no advancement in learning without the advance in finding out and using the modern tool of learning the language itself. Therefore, scientific advancements in designing the tools of language learning such as language laboratory will enrich the steps of learning English.

Besides, good and representative language laboratory should comprise some electronic devices that have to be able to support students' in learning language Innovative products, such as digital multimedia control, wireless headsets and microphones, and the interactive response pad are very useful for students learning languages. By providing language laboratory with those electronic

tools, it is expected that the instructional process will run well. Teacher should take part as a language laboratory manager who should definitely knows various electronic tools based on students' characteristics and their needs.

There are some technological devices considered as main tools in language laboratory. First of all, a set of compulsory equipment in language laboratory is microcontroller system. The existence of this system is very essential. In detail, the microcontroller system controls foreign language learning process as a whole, particularly in controlling its mechanical system. It will be nothing if there is none of these tools. A set of computer can be categorized as microcontroller system. It implies that computer is required to carry out foreign language teaching and learning in language laboratory. There are two kinds of microcontroller system that should be provided and set carefully and safely. They are teacher controller and students controller. Teacher controller has a function to disseminate information (text, video, audio, image, and sound) to all or most of the students while they are using it. It controls the students' activities. Furthermore, student controller serves to transmit information and material from audio and video to teachers (Patel, 2014:260).

Then, students' panels and headset are compulsory to be provided in language laboratory. In this case, each students' workstation must be provided with panels in which it is controlled by microcontroller system. A simple students' panels can be designed in terms of some bottons and flickering light. Moreover, the headset is much important to be provided in language laboratory. A teacher who takes part also as manager of language laboratory should provide this important tool since this will be used by students to do some particular learning activities, such as:

- 1. Listening to the instruction given by the teacher or instructor;
- 2. Listening to conversations and sounds from multimedia devices;
- 3. Listening to the voice of a friend or in a group conversation;

4. Calling the teacher if there are troubles and difficulties in using the tools (supported by headset and phone).

Due to the importance of these tools, a manager of language laboratory should provide some of this types of headset that enable to:

- 1. be functioned as *mic* and *phone* without volume regulator;
- 2. be supported with complete equipments, such as: *mic, phone,* and *volume regulator*.

FUNDAMENTAL ASPECTS IN MANAGING LANGUAGE LABORATORY TO SUPPORT TECHNOLOGY-BASED FOREIGN LANGUAGE INSTRUCTION

Managing language laboratory as a special place to support instructional activities for students should consider some important aspects. These aspects will become the regulation in which language laboratory management and its development run well as we expect. The purpose of knowing these aspects is to be aware that good language laboratory cannot be seen not only from its sophisticated technological tools but also the other important things on how the user of language laboratory follows the procedures to create comfortable and safe circumstances.

In relation to language laboratory management, Marzuki (2014, p.1-11) conducts a research about how to manage language laboratory effectively. He states that at least there are four considerable aspects, namely laboratory facilities, standard operating procedures, the students themselves as users of language laboratory, and laboratory coordinators. Considering that these aspects are essential to be discussed further, the writer summarizes and reviews some fundamental aspects in managing language laboratory in details as follows:

1. Planning

Planning is the first aspect that should be regarded by the foreign language teacher. Managing language laboratory without

planning will get nothing in terms of the way to develop its function. Moving from traditional classroom activities to language laboratory needs to be planned carefully. Deeming and thinking of some possible factors, e.g. teachers and students activities while they are learning in language laboratory, appropriate material, time allocation, criteria of learning success, classroom control, classroom management are absolutely required. Some of main activities in this planning stage are as follows:

- a. Arranging all instructional activities will be carried out by both of students and teacher in language laboratory;
- b. Determining the criteria of success of each instructional activity (learning result) in language laboratory;
- c. Arranging regular schedule of language laboratory user.

2. Organizing

The second aspect in managing language laboratory is organizing. It refers to the attempt of running all language laboratory activities that have been planned in advance. There are two main activities in this stage. They are setting and regulating. Each of them is described briefly as follows:

- a. Setting. This refers to the activities in which physical situation of language laboratory (e.g. seat position, furniture, lighting, wires position, teaching and learning stationaries, etc) are set carefully. These setting activities have to consider some important principles including safety, effectiveness, efficiency, and its comfort;
- b. Regulating. This refers to the activities of making guideline and regulation in forms of formal rules that should be followed by teacher and students. These activities regulate and decide the organization structure of language laboratory, job description, regular schedule, formal rules, standard operation procedures of using language laboratory devices, and its safety rules.

3. Administrating

Administrating is the other important aspects in managing language laboratory. Administrating is the way to record the important data and related files as an attempt to keep and document language laboratory activities regularly and carefully. The function of administrating activities are:

- a. Giving data and information fast and accurately related to the physical condition of language laboratory;
- b. Developing evaluation activities as a basic to maximize the function of language laboratory;
- c. Taking notes to get accurate data of language laboratory devices and its manual user.

As important as other aspects, administrating activity must be applied in managing laboratory. Thus, some of data that need to be administrated carefully include the list of language laboratory devices and its spesification, the language laboratory devices of manual user, the list of language laboratory user and their activities, the schedule of language laboratory maintenance, and the regular service of language laboratory devices.

4. Maintenance

Maintenance deals with the effort of protection. It indicates that we should maintain and protect language laboratory devices to be used effectively. No matter how sophisticated such language laboratory tools we have, maintenance is compulsory to be regarded by all the user. There are some language laboratorium tools that need to be maintained regularly, such as the language laboratory utilities and its accesories, the electricity, the fire detector, the wire position, the internet networking, the software program, the hardware, etc. Maintaining the language laboratory requires much time and cost. It enables us to repair and recheck possible damage situation that can occur anytime when we are utilizing language laboratory.

5. Safety

The other important aspect in managing language laboratory is safety. Using language laboratory devices is highly risk with some possible accident may occur incidentally or not. Perrow (2001) explains the cause of accident may happen in language laboratory. They are:

- a. Lack of knowledge in following standar operation procedures of using language laboratory;
- b. Unclear safety rules proposed by language laboratory manager. Giving clear explanation of safety rules profesionally, patiently, and accurately to the students are absolutely needed;
- c. Lack of supervision and control by language laboratory manager toward all activities have been carried out;
- d. Less of awareness and responsibility from the students to maintain language laboratory.

It is unavoidable that most of students are curious learners. Naturally, they want to know anything. Some of them may feel happy to use electronic devices that they never use before. For instance, they press any kinds of both hardware and software buttons, they open unimportant website if it is provided by internet networking, or they open irrelevant application available. As a result, awareness and responsibility in maintaining language laboratory device is ignored by students due to their self-curiosity.

6. Funding

Funding is the last important aspect that requires commitment and policy to cover and to support all instructional activities in language laboratory. Such condition will be ineffective and inefficient for our activities without supported by sufficient funding. In relation to the funding aspect, language laboratory manager should regulate how much cost would be allocated for language laboratory equipment and its maintenances. Sufficient cost will support either the success of technology-based instruction using language laboratory or the success of scale priority to be covered urgently related to the maintenance aspect.

Furthermore, funding aspect requires need analysis, measurement, and priority scale analysis to see how much money and cost should be allocated for. Funding can be allocated for purchasing such technological tools in language laboratory based on students' needs. It also can be spent for repairing and maintaining these tools regularly based on particular conditions, such as:

- a. Troubles and unstable electricity network;
- b. Troubles on the furniture of language laboratory;
- c. Serious troubles on the electronic devices that need electrician's help and service;
- d. Unpredictable troubles of other components in language laboratory.
- e. Special cost allocated for maintenance of internet networking (if any), hardware as well as software program provided.

In line with these, commitment and cooperation of many people are highly required. Allocating sufficient money to maintain language laboratory and its devices is even hard work and complicated. Indeed, some schools propose and request donation legally to the local government. The donation is aimed to provide and contribute the success of instructional process using language laboratory. Finally, it could give positive impact to the students themselves.

SOME PRINCIPLES OF UTILIZING LANGUAGE LABORATORY TO SUPPORT TECHNOLOGY-BASED FOREIGN LANGUAGE INSTRUCTION

Utilizing language laboratory for learning language is not easy. It requires much time to study and to train all people to become familiar with the technology. We have to keep in mind that not all students are not well-trained. It is very important to be aware that teachers cannot expect them to learn language and technology at once. There are some principles of utilizing technological tools in language laboratory adapted from Erben et. al (2009).

1. Knowing our students

In order to use language laboratory for our lessons, it is much essential to become familiar with our students' familiarity with the tools provided. Some of them maybe know how to operate personal computer, laptop, or tape recorder to be connected directly with the lesson or with the teacher's instruction. However, sometimes, we find out that there will be some of them feel uncomfortable and highly anxious to operate it as they do not have and usethese tools due to their economical status. It may be serious problem if we let them to use language devices without knowing their basic knowledge to operate these tools. That is why; it is better and requiredfor us to observe our students' characteristics on their familiarity in using electronic devices.

2. Conducting needs analysis at the beginning of academic year

Needs analysis in this case refers to a survey relating to the selection of appropriate technological tools used in language laboratory based on students' characteristics. Teachers can easily construct a short and simple survey at the beginning af academic year in order to observe the students' familiarity with technology used in language laboratory. The results of this needs analysis will enable a teacher to better judge how much technological tools to infuse into a lesson. Moreover, teacher needs to think how much scaffolding and communicative instruction a teacher needs in order to support student learning.

3. Selecting materials

A teacher carries out the instructional process in language laboratory needs to consider the target material that fits with the students' characteristics. Not all the materials can be learned using technological tools in language laboratory. As teachers, we need to be aware of selecting materials that fit the students in terms of their learning potential and technology literacy. There should be particular material that may appropriate to be taught in conventional classroom instead of using language laboratory.

The content of applied curriculum in such area also determines selected materials to be learned by students. For instance, Kurikulum Tingkat Satuan Pendidikan (School Level-based Curriculum) 2006 in Indonesia requires each unit or level of education has an autonomy to develop its own curriculum accordance with its own potencies, social needs, environment, strength, weakness, opportunity, and threats in the efforts of developing the quality, efficiency, and propagation of education (Mulyasa, 2007:21). Consequently, each school area is different from each other in terms of selecting materials that fit with their geographical and environmental potencies. One school may select particular material that can be potentially learned by utilizing language laboratory and the others may not. Furthermore, one school may select material in which the students feel easy to learn utilizing such technological tools, while the others may feel comfortable learning by conventional way. In conclusion, teacher needs to be skilled in selecting materials adapted to the circumstances of school and students themselves.

4. Maximizing roles of teacher

One of the biggest challenges moving from traditional and conventional class to language laboratory is related to the roles of teacher. A teacher may become the center of learning while the students are studying in the conventional class. On the other hand, when the instructional process is carried out in the language laboratory, a teacher has to act not only as a center of learning, but also acts as many actors. A teacher may become an instructor, facilitator, advisor, classroom controller, language laboratory manager, or even as technician. It is inevitable that the more a teacher employs instructional process in language laboratory, the less-teacher centered and the more students-centered will become. In other words, a teacher needs to be aware that their tasks are not easy to monitor the students' activities.

Regarding with the tasks of teacher as many actors in language laboratory, we get the fact that sometimes a teacher also acts as a technician. Technology-based foreign language instruction requires experienced teacher that will guide students to operate many kinds of technological tools in language laboratory. As a result, maximizing roles of teacher is more difficult than acting as a teacher only. Admittedly or not, we need to force ourselves to train and to learn operating many kinds of technological devices that support foreign language learning.

5. Checking the technological tools in the language laboratory regularly

One of the difficulties in utilizing the language laboratory is about the potential problem situation, for instance: unstable electrical networking, unsafe electrical wires that connect the technological tools each other, or other tools that cannot be functioned properly. Unanticipated events such as these can easily get students upset or frustrated. To reduce such unavoidable frustration, a teacher needs to check both the hardware and software in advance before inviting students to learn in language laboratory. As a result, we can detect the readiness of electronic devices to be used by students. One of the efforts to do this is arranging a regular schedule of language laboratory investigation. It can be done weekly or monthly depending on the situation of language laboratory itself.

CONCLUSION AND SUGGESTIONS

Many teachers try to create innovative instructional activities. In this globalization era, learning foreign language can be implemented in many ways with various teaching aids and learning media. Language laboratory can be an alternative media to facilitate students in learning foreign language supporting with such technological tools. The decision of utilizing language laboratory should be adapted with students' needs. In a traditional or conventional class, the teachers are the center of teaching and learning. Thus, it is easy for them to monitor what goes on in the classroom. However, by utilizing language laboratory, admittedly or not, a teacher needs to train students to work effectively since language laboratory offers different types of learning circumstances. This condition forces the teacher to maximize their tasks that will determine the success of instructional activities in language laboratory.

Therefore, in order to create optimal use of language laboratory, an instructional planning is absolutely needed. Finally, language teacher is recommended to do the principles of utilizing language laboratory by considering possible factors to influence the success of instructional activities. The process of managing language laboratory to support effective technological-based foreign language instruction is challenging task. Self managing in isolation from other teachers is even more complicated. As a result, cooperation and commitment from all people in such institution are required.

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